
Subject: Re: Avoiding a for cycle
Posted by [Med Bennett](#) on Thu, 06 Apr 2000 07:00:00 GMT
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Hi Ricardo,

You can use the SHIFT command in this situation - do something like

```
max_pos = where(data gt shift(data,-1) and data gt shift(data,1))
```

of course you have to check if the edge effects make sense in your case.

Ricardo Fonseca wrote:

```
> Hi
>
> I'm looking for a more efficient way of implementing the following (i.e.
> avoiding the for cycle) which is a routine for finding local maximums
>
> ; Data is a 1D Array
>
> s = Size(Data)
>
> nx = s[1]
>
> max_pos = [-1]
>
> for i = 1, nx-1 do $
>   if ((Data[i] gt Data[i-1]) and (Data[i] gt Data[i+1])) then $
>     max_pos = [[max_pos],i]
>
> ; and then throw away the first element...
>
> Any ideas? Thanks in advance, Ricardo
```
